

## CLAIMS:

1. - 7. (Cancelled)
8. (Original) A method for treatment of a condition associated with breakdown of the blood brain barrier comprising administering to a subject in need of such treatment, a pharmaceutically effective amount of a peptide antagonist of zonulin, wherein said peptide antagonist comprises amino acid sequence SEQ ID NO:35, wherein said peptide antagonist binds to zonula occludens toxin receptor in the brain of said subject, yet does not physiologically modulate the opening of tight junctions in said brain.
9. (Currently amended) The method of claim ~~3~~ 8 wherein the condition is cerebral ischemia.
10. (Currently amended) The method of claim ~~3~~ 8 wherein the condition is stroke or cerebral edema.
11. (Currently amended) The method of claim ~~3~~ 8 wherein the condition is hypertension.
12. (Currently amended) The method of claim ~~3~~ 8 wherein the condition is convulsive seizure.
13. (Currently amended) The method of claim ~~3~~ 8 wherein the condition is uremia.
14. (Currently amended) The method of claim ~~3~~ 8 wherein the condition is meningitis.
15. (Currently amended) The method of claim ~~3~~ 8 wherein the condition is encephalitis.
16. (Currently amended) The method of claim ~~3~~ 8 wherein the condition is encephalomyelitis.
17. (Currently amended) The method of claim ~~3~~ 8 wherein the condition is traumatic brain injury.
18. (Currently amended) The method of claim ~~3~~ 8 wherein the condition is radiation brain injury.
19. (Currently amended) The method of claim ~~3~~ 8 wherein the condition is multiple sclerosis.
20. (Currently amended) The method of claim ~~3~~ 8 wherein the condition is or Guillain-Barre Syndrome.

21.-33. (Cancelled)